Malibu Creek and Rural Santa Monica Bay WMA
Watershed Assessment

Makeup of the Watershed

The Malibu Creek Watershed is the second largest watershed to drain into the Santa Monica Bay. The watershed is comprised of the cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, Simi Valley, Thousand Oaks, and Westlake Village; the counties of Ventura and Los Angeles; Caltrans; State and National Parks; and Santa Monica Mountains Conservancy. This 80% undeveloped watershed presents unique challenges in maintaining an effective NPDES program since the majority of the conveyance system is natural creeks and streams. Other land uses in the watershed include residential (13%), commercial and light industrial (4%), and agriculture (3%).

Agency Cooperation

Our Watershed Management Committee (WMC) consists of the County Los Angeles, and the Cities of Calabasas, Agoura Hills, Westlake Village, and Malibu. For several years the WMC member agencies have met monthly (rather than the required quarterly meetings) with the larger Malibu Creek Watershed TMDL working group: to include the County of Ventura; Cities of Hidden Hills and Thousand Oaks; Caltrans; and State and National Parks. Since the adoption of the Malibu Creek and Lagoon Bacteria Total Maximum Daily Load (TMDL), the focus of the monthly meetings has been focused on TMDL compliance. WMC meets as often as needed after the monthly meeting to discuss the MS4 permit (permit) issues, but also holds a regular WMC meeting on a quarterly basis. These meetings have been helpful to discuss the various aspects of permit implementation and help to provide the opportunity to share our ideas and concerns regarding the best approach for compliance. A monthly “brown bag” lunch presentation from water quality product vendors and consultants has been added before each monthly meeting to keep apprised of new technologies.

In addition to our monthly TMDL Working Group meetings, the watershed agencies attend several other water quality related meetings such as Public Outreach, Malibu Creek Watershed Advisory Council and its related subcommittees, Jurisdictional Groups 1 and 4 (J 1/4) TMDL Working Group, and the Santa Monica Bay Beaches Ad Hoc Committee, and the Greater Los Angeles Integrated Regional Water Management Program (IRWMP) Leadership Committee and North Santa Monica Bay Steering Committee to name a few. The IRWMP group activities resulted in an award of $25 million for critical regional projects, of which a little more than $1 million was allocated to the Malibu Creek Watershed, and projects are in various stages of implementation pending release of State proposition funding.

Outreach Efforts

During the cycle of this Permit, the watershed agencies have collaborated on a number of events and projects for public outreach. The watershed agencies have co-sponsored

the Resource Conservation District's Malibu Creek Watershed Coordinator (MCW Coordinator) to develop, coordinate, and implement stormwater/urban runoff pollution prevention education programs. Through the MCW Coordinator, the cities have promoted water conservation via partnerships with local water districts to advertise low-water-use toilets and high efficiency washers, worked with the equestrian community to learn about best management practices, and have collaborated with area specialists to gain knowledge of xeriscaping and install local demonstration gardens. The MCW Coordinator launched the "Go Wild" Nativescaping project this year to install "nativescaped" gardens at area schools and spread the message about the importance of smarter gardening techniques. In the FY 04/05, the WMC pulled together funding to run pollution prevention PSAs on NBC, that still run today on local channels. The pollution prevention PSAs, addressing pool draining and over-watering of lawn issues, were estimated to make over 3.3 million impressions. The watershed cities participate in and co-sponsor annual Earth Day and Coastal Clean-Up Day events. The watershed agencies also collectively contributed to the development of a TMDL video "the Clean Water Act and Our Backyards," which is frequently used in conjunction with speaker bureaus to promote the film's message to community group and is regularly broadcast on local cable channels. Through a cooperative effort, the watershed agencies funded the revision and reprint of *Living Lightly in Our Watersheds:* a *Guide for Residents of the North Santa Monica Bay Watersheds*. This document is recognized by many residents and officials as a valuable and popular public education and outreach tool. It continues to be distributed to the public at city halls and public events, is available by request, and can be downloaded from www.MalibuWatershed.org.

Monitoring Projects

In 2004 the watershed agencies were awarded a Prop 13 grant to implement the Malibu Creek- Watershed Monitoring Program. A Baseline Monitoring Report was completed as part of the program and the Final Report was submitted to the State in March 2008. The Final Report provides baseline water quality data for the watershed, identifies and assesses pollution "hot spots," and narrows down sources of pollution so that they may better be targeted for elimination. This program was completed at the recommendation of the Federal Environmental Protection Agency (EPA) to provide further verification of their model and refine current and up-coming TMDLs for the Malibu Creek Watershed as appropriate.

During the past year, the WMC implemented a Compliance Monitoring Program for bacteria, and continued a feasibility study of the possible regional projects identified in the Integrated TMDL Implementation Plan for the Malibu Creek Watershed (Plan) which was submitted as a requirement of the Malibu Creek Bacteria TMDL. This Plan has not yet been formally approved by the Regional Board. A Reference Watershed Study, "Fecal Indicator Bacteria (FIB) During Dry Weather from Southern California Reference Streams" (another requirement of the Malibu Creek Bacteria TMDL) was also submitted and reported on for last year's reporting period. The WMC agencies also started planning of the next Water Runoff Conference.

Below are some of the achievements of the individual WMC member cities:

City of Malibu

The City of Malibu takes an extremely active role in educating the community about environmental protection and addressing water quality issues while complying with regulations including the NPDES permit, the Santa Monica Bay Bacteria TMDLS, and the Malibu Creek Bacteria and Nutrient TMDLs. Below are highlights from this past reporting year.

The City of Malibu continues to place water quality issues as a top priority and has worked closely with regional partner agencies to do so. The City also continues to seek partnerships with environmental groups and other stakeholders as it works on solutions for improving the quality of our receiving waters. Two important partnerships are the Paradise Cove Storm Water Treatment Facility and the Malibu Water Conservation Partners group. The Paradise Cove Storm Water Treatment Facility project involves collaboration with Kissel Co. (the property owner) to construct a filtration and disinfection facility for the outfall of Ramirez Canyon Creek at Paradise Cove, for which the City was awarded a Prop 40 Clean Beaches Initiative Grant from the State. This project was stalled due to the State proposition funding freeze, but has been awarded Federal American Recovery and Reinvestment Act (ARRA) funds to continue. It will be constructed starting in the fall of 2009. The Malibu Water Conservation Partners group is a collaborative effort between the City of Malibu, Los Angeles County Waterworks District 29 (local water retailer), West Basin Municipal Water District (local water wholesaler), Supervisor Yaroslavsky's office, and Las Virgenes Municipal Water District (neighboring upstream water agency). This group has been working together to promote the common message that wasting water can pollute water. This group has been busy implementing projects that eliminate water waste by eliminating runoff, such as a workshop for Spanish Speaking Landscapers, free water use evaluations, and Ocean Friendly Garden workshops and demonstration gardens (with Surfrider Foundation). The City also partnered with local organizations such as the Malibu Surfing Association (MSA) and Celebrity Surf Center to captain a Coastal Cleanup Day site at Surfrider Beach, and regularly collaborates with MSA to help promote each other's events and education opportunities.

The City remains an active participant to the regional efforts explained above in addition to its own water quality efforts. The City made progress on major projects in its own Integrated Water Quality Management Plan: The Civic Center Storm Water Treatment Facility; the Legacy Park Project; and Environmental Impact report and preliminary design of a centralized wastewater treatment facility in the Civic Center Area are three significant projects that the City has undertaken to improve water quality. The Civic Center Storm Water Treatment Facility, a storm water filtration and disinfection facility continues to process up to 1,400 gallons per minute (gpm) of urban runoff and storm water from the Civic Center Way / Cross Creek area, and has been operational since February 2007. The facility has shown to efficiently remove gross solids and debris from runoff prior to being pumped from Civic Center Way, Cross Creek Road and the

Malibu Road storm drains to the treatment facility. The facility then filters the flow further and disinfects it by ozonation. Continued testing results show that, on the average, bacterial indicators are observed below detection limits. The treated water is recirculated in the system before spreading on land and will be used for landscape irrigation in the Civic Center area when the Legacy Park project is constructed. Therefore, this treated water has not been discharged to the creek. The City has also awarded contracts for construction and construction management of Legacy Park, a multi-million dollar integrated effort at addressing water issues in the Civic Center area. Funded by the City and various public grants and donations, the Malibu Legacy Park Project has multiple benefits for the environment and the community. The project addresses critical issues: (1) bacteria reduction by stormwater treatment, (2) restoration/development of riparian habitats, and (3) the development of an open space area for passive recreation and environmental education. The Malibu Legacy Park Project will be constructed in the Civic Center area, directly adjacent to significant natural resources, a location which is a point of interest to various regulatory agencies, environmental groups and the citizens because of the unique opportunity to simultaneously improve water quality, restore native riparian habitat, and preserve open space. It will help to enhance compliance with the municipal storm water NPDES permit, and TMDLs (Bacteria, Nutrient and Trash (pending) for Malibu Creek and Santa Monica Bay). Legacy Park includes construction an 8 acre foot intermittent wetland that will be used to store storm flows greater than 1,400 gpm until it can be metered through the system for treatment, in addition to the establishment of a park. After Legacy Park is developed, the dry and wet weather treated storm water will be used for park irrigation. The City Council has committed $2.6 Million to the design and environmental impact report for a centralized wastewater treatment facility. In addition, a $363,000 groundwater and hydrology study of the Civic Center area has been initiated and is anticipated to be completed in spring of 2010. The Cross Creek Roadway Improvements project, reported on in last year's annual report, enhanced the commercial hub of the City by realigning the road with traffic calming features, installing permeable paver walkways for improved pedestrian access, constructing permeable parking areas, installing "purple pipes" for use of recycled water for irrigation when it becomes available from the Legacy Park project, and providing only native drought tolerant landscaping along the road. It also incorporated tiles purchased by the community to help support the Legacy Park project. The Cross Creek Roadway improvements project was awarded a Southern California Association of Governments (SCAG) Compass Blueprint Sustainability Award Honorable Mention this past year.

The City of Malibu has also implemented an extensive Onsite Wastewater Treatment System (OWTS) permitting and inspection program with a "point of sale" element, and has revised its municipal code to enhance capability of code enforcement and efficiency by adding in a fine structure. The City is participating in Regional Monitoring Programs for the protection of the Area of Special Biological Significance (ASBS) through Southern California Coastal Water Research Project's (SCCWRP) Bight 08 monitoring program, and funded a preliminary study with the United States Geological Survey (USGS) to address recurring water-quality issues related to nutrients and fecal indicator bacteria (FIB) in near-shore ocean water and Malibu Lagoon. This work was done in

July, concurrently with ongoing epidemiological studies of FIB exposure and human health effects along Malibu beaches being done by the SCCWRP. The findings of this pilot program will be used to develop a full study proposal to be submitted in December 2009. Additional City of Malibu projects and efforts are detailed in its Individual Annual Report.

City of Westlake Village

This reporting year had a number of new programs and projects the City implemented to improve water quality. The following are some of our highlights:

In response to a growing number of mobile carwashes operating within the City we began a roving carwash inspection program with dedicated staff during peak seasons of the year to ensure proper methods are followed by operators and to provide guidance when needed. The inspection staff observed approximately 70% noncompliance in the first week quickly turn to 100% compliance by the third week.

Currently Westlake Village is developing a regional sports complex with the environment in mind. The over 50 acre complex has been designed with fields and slope landscaped with reclaimed water, water usage is minimized with use of California Natives and an efficient irrigation system, the entire irrigation system is networked into the City's Citywide Centrally Controlled Irrigation System with its own weather based ET System, runoff from both the fields and the parking lot will be captured in a Stormwater Harvesting Unit to treat and reuse this water on-site, and on-site debris basins will be planted for further treatment and removal of silt before waters enter the storm drain system.

The City, in partnership with Las Virgenes Municipal Water District, is currently modifying the City's irrigation system and outreach to residents with known over irrigation issues. The Citywide Irrigation System Retrofit and Median Enhancements Project reduces water use by reducing amount of turf and replacing with more California Native plants, medians are lowered and drain into sumps which keeps water off the streets and, thus, draining into the Lake. The irrigation system was completely replaced for less water use and improved efficiency. All irrigation controllers in the City connected to Central Control System at City Hall where water use is monitored to improve control and reaction time to irrigation system breaks.

Our trash collection and monitoring program was recently formed from historical programs and practices such as; weekly street sweeping of all city streets throughout, weekly cleaning of city maintained stormdrain channels, daily miscellaneous trash collection points in the public right-of-way throughout the City, and public education.

A past highlight of the City was the completion of a Prop. 13 Grant issued by the State Water Resources Control Board that funded the implement of a water quality improvement project goaled towards reduction of sediments and pollutant loading entering Westlake Lake via the "Three Springs Drain." This project installed curb inlet

trash and debris screens at all critical catch basins, and retrofitted eight debris basin standpipes with a filter fabric to prevent sediment mobility to the Lake

City of Agoura Hills

A major strength of our City's water quality program is that it enjoys the full support of both the departmental staff and the City Council. Having this kind of support lends to the program a genuine teamwork approach with full commitment to affecting a positive difference in the health of our watershed. This support led to the creation of an addition position dedicated to the implementation of water quality programs and projects, increases to the citywide street sweeping program, renewal of the California Adopt a Highway Program, several retrofits of catch basins to address the coming trash TMDL, bioswale and retention facilities on two of the City's freeway interchanges, and outreach campaigns that include creek cleanups and earth day events as well as the creation of a webpage with a number of housekeeping BMP fact sheets and announcements.

The City's water quality program participated in a grant funded watershed-wide monitoring program, took the lead for the Malibu Creek Watershed in implementing and managing a three year Compliance Monitoring Program, and conducted several special monitoring programs.

Currently the City is piloting an ozone-plasma treatment facility that when fully operational will address a number of pollutants such as bacteria, nutrients, metals and sedimentation. While the unit is still semi operational, it is already showing improvements to the downstream natural water body with improved clarity and thriving ecosystem.

City of Calabasas

During the reporting year 08-09, City of Calabasas became the first California city to adopt a permit system for mobile car wash operators. Under the new system, each mobile car wash operator must demonstrate their operation on a city vehicle prior to receiving a permit. The permit is valid for one year and each permittee is issued a certificate to show to security guards in gated communities and to receives a free standing sign to display at the job site to avoid code enforcement action.

During the reporting period, Calabasas adopted a dog-waste ordinance establishing fines for dog-owners that don't pick-up after their dogs. Calabasas purchased a device that contains a compostable bag and a small shovel to give away to residents walking their dogs on the street.

During the 08-09 reporting period, City of Calabasas completed the construction a new CDS unit at the Calabasas Civic Center. This device treats stormwater from the civic center site and surrounding areas. Every year, the city removes more 50 tons of trash and sediments from four CDS units and one biofiltration site on Los Hills Road, therefore preventing the waste from entering the City's creeks. City entered into a

$100,000 contract with a local stormwater maintenance company to maintain city's CDS units and catch basin baskets on a quarterly basis.

Two citywide creek clean-up events were held during the reporting period with the participation of over 150 volunteers. Earth Day celebration with the focus on stream restoration was held in April 2009. More than 800 people visited the booths organized by many environmental organizations such as Heal the Bay, Las Virgenes Municipal Water District, Mountain Restoration Trust, etc.

The City of Calabasas has also implemented an extensive Onsite Wastewater Treatment System (OWTS) permitting and inspection program and has revised its municipal code to enhance capability of code enforcement and efficiency by adding in a fine structure.

The City of Calabasas has continued to take an extremely active role in addressing and education residents, businesses and students on water quality issues and complying with regulations including the NPDES permit and both the Los Angeles River Trash TMDL and Malibu Creek Bacteria and Nutrient TMDLs. Several articles were published in local newspapers, city's e-news and on the internet. Each Environmental Commission meeting contains messages, documentaries or programs regarding water quality or stormwater pollution prevention measures. The City of Calabasas has made water quality issues a top priority and has worked closely with the Regional Water Quality Control Board in doing so. The City also continues to seek partnerships with environmental groups and other stakeholders as it works on solutions for improving the quality of our receiving waters. City staff met with all maintenance crew of the Las Virgenes Unified School District during a 2-hour session to educate them about pollution prevention measure, water conservation and water quality.

Assessment Summary

As stated in the MS4 Permit, the Regional Board supports a Watershed Management Approach to address water quality protection in the region. The objective of the Watershed Management Approach should be to provide a comprehensive and integrated strategy towards water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. It emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with available resources.

As all the Malibu Creek and Rural Watershed WMC agencies endeavor to implement their specific NPDES programs, we continue even closer group collaboration to measure the effectiveness we are making as a watershed through the various monitoring programs in our watershed. We are transitioning into a new period of water quality as we carryout implementation plan measures, compliance monitoring, and

recalibrate our individual efforts with effectiveness at a local level into efforts with watershed wide significance.